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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,565

10/14/2005

Ralf-Dieter Busse

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EXAMINER

BUI, HUNG S

ART UNIT

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2841

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,565	Applicant(s) BUSSE ET AL.	
	Examiner HUNG S. BUI	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/01/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/01/2008 has been entered.

Allowable Subject Matter

2. The indicated allowability of claims 1-20 is withdrawn in view of the newly discovered reference(s) to Dennis et al. [US 4,767,338]. Rejections based on the newly cited reference(s) follow.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in 10236361.7 on 08/08/2002.

Oath/Declaration

4. The oath/declaration filed on 10/14/2005 is acceptable.

Information Disclosure Statement

5. The IDS filed on 02/01/2008 have been considered and made of record.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5, 7-8, 12-16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phommachanh et al. [US 6,358,093] in view of Dennis et al. [US 4,767,338].

Regarding claims 1, 4-5, 14-16 and 18, Phommachanh et al. disclose a box connection module (figures 2 and 4) for telecommunications and data technology, comprising a housing (cover of element 10, figure 2) in which externally accessible input (26, 28, figure 2) and output (22, 24, figure 4) contacts are arranged for the connection of cables and cores, the housing having a cavity (10, figure 2) in which at least one printed circuit board (48, figure 4) is arranged, the input and output contacts being arranged on opposite end faces (input/output are arranged in opposite end, see figures 2 and 4) of the housing, and the input contacts being associated with one input side and the output contacts being associated with one output side, wherein the input contacts are in the form of at least two mutually opposite rows of contacts, and the output contacts are in the form of at least one plug RJ-connector (22, 24, figure 4) with at least two input contacts in the first row and least two input contacts in the second row being connected to the output contacts; in the at least one plug connector, and with the input

contacts in the first row (26, figure 2) and in the second row (28, figure 2) being connected via the at least one printing circuit board to the output contacts in the plug connector.

Phommachanh et al., disclose the instant claimed invention except for the specific input and/or output connectors.

Dennis et al. disclose an interface device (figures 2-3) including an input connector (30, figures 2-3) having a plurality of electrical contacts connected to at least two output electrical contacts of at least one output connector of a row of output connectors (40, figures 2-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an output plug connector and at least one row input connectors, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use setup the two row of connector being input connectors and the plug connector being an output plug connector, in Phommachanh et al., as suggested by Dennis et al., for the purpose of saving space in a communication network such as a switch box.

Regarding claim 2 and 12, Phommachanh et al., as modified, disclose the input contacts are in the form of insulation displacement terminal contacts (see column 3, line 2).

Regarding claim 3, Phommachanh et al., as modified, disclose the plug connector is in the form of an R J-45 female connector (see column 2, lines 56-65).

Regarding claim 7, Phommachanh et al. as modified, disclose the instant claimed invention except for wherein function elements are arranged on the printed circuit board and are arranged electrically between the input and output contacts.

Dennis et al. disclose functional traces being arranged on the printed circuit board provided electrically to connect between the inputs and output (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have functional elements on the printed circuit board, of Phommachanh et al., as suggested by Dennis et al., for the purpose of providing electrically interconnection between inputs and outputs.

Regarding claim 8, PHommachanh et al., as modified, disclose the instant claimed invention except for the printed circuit board including a protection element.

Official notice is taken that it is well known to use a protection element on printed circuit board for the benefit of protecting circuit being damage by mishandling such as short circuit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a protection element on printed circuit board of Phommachanh et al., as modified, for the purpose of preventing a short circuit.

Regarding claim 13, Phommachanh et al. disclose a distribution box connection module (figures 2 and 4) for telecommunications and data technology, comprising a housing (cover of element 10, figure 2) having a first end face and a second, opposite

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end face; at least one printed circuit board (48, figure 4) mounted to the housing; a first row of contacts (26, figure 2) arranged on the first end face of the housing, and being configured to receive wire cores from outside the housing (see figures 2 and 4); a second row of contacts (28, figure 2) arranged on the first end face of the housing and being configured to receive wire cores from outside the housing; and at least one plug connector (22, 24, figure 4) contacts arranged on the second end face of the housing, the plug connector electrically contacted to the first and second rows contacts in the housing via the printed circuit board (see figure 4).

Phommachanh et al., disclose the instant claimed invention except for the specific input and/or output connector contacts.

Dennis et al. disclose an interface device (figures 2-3) including an input connector (30, figures 2-3) having a plurality of electrical contacts connected to at least two output electrical contacts of at least one output connector of a row of output connectors (40, figures 2-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an output plug connector and at least one row input connectors, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use setup the two row of connector being input connectors and the plug connector being an output plug connector, in Phommachanh et al., as

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suggested by Dennis et al., for the purpose of saving space in a communication network such as a switch box.

8. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phommachanh et al., as modified, as applied to claim 1 above, and further in view of Fair et al. [US 6,419,526].

Regarding claims 6 and 19, Phommachanh et al., as modified, disclose the instant claimed invention except for the printed circuit boards being connected to one another via a flat ribbon cable.

Fair et al. disclose an electronic device (figures 6a and 6b) having at least two row or connectors (520, figure 6b) connected with a first printed circuit board (300, figure 6b) and a second row of connectors (520, figure 6b) connected with a second printed circuit board (300, figure 6b).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the mounting design of row connectors with a plurality of printed circuit board in Phommachanh et al., as modified, as suggested by Fair et al., for the purpose of providing multiple input/out connections therein the electronic module.

Official notice is taken that it well known to connect a circuit board to a circuit board by flat ribbon cable.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flat cable to connect between two circuit boards, for the purpose of saving spaces therebetween the printed circuit boards.

9. Claims 9-11, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phommachanh et al., as modified, as applied to claim 1 above, and further in view of Kamarauskas et al. [US 6,609,929].

Regarding claims 9-10, 17 and 20, Phommachanh et al., as modified, disclose the housing being formed of two parts (see figures 2 and 4).

Phommachanh et al., as modified, disclose the instant claimed invention except for the housing being formed of metal.

Kamarauskas et al. discloses disclose the housing is formed from two or more parts with at least part of the housing being composed of metal (see column 3, lines 25-50) and including a plurality of grounding tabs (64, figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use metal to make the housing of Phommachanh et al., as modified, as suggested by Kamarauskas et al., for the purpose of grounding the components on the circuit board.

Regarding claim 11, Phommachanh et al., as modified, disclose the instant claimed invention except for the metal housing being formed with connecting elements for profiled rods and/or rails.

Kamarauskas et al. disclose the metal housing being formed with connecting elements for profiled rods and/or rails (element 12, column 3 lines 25-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the shape design of the connecting element of Kamarauskas

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et al., in Phommachanh et al., as modified, for the purpose of shielding/grounding the components therein the electronic module.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Grabinger et al. [US 6,504,726] disclose telecommunications patch panel;
- Aponte et al. [US 63,71,780] disclose RJ jack with switch; and
- Kang [US 6,319,047] disclose IDC adapter.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hung S. Bui/
Primary Examiner,
Art Unit 2841
03/22/2008